

I Claim:

1. A method for minimizing the incidence and effect of High Altitude Pulmonary Edema ("HAPE") comprising the steps of:

- a. Ingesting foods selected so as to maximize the change in bicarbonate concentrations in the pulmonary arterial blood plasma;
- b. Refraining from ingesting said foods that reduce said bicarbonate concentration in said blood plasma.

2. The method of Claim 1, said foods that maximize said change in bicarbonate concentration comprising a digestible carbohydrate selected so as to maximize a carbon content and selected so as to maximize an oxygen content per calorie per gram dry weight of said digestible carbohydrate.

3. The method of Claim 2, said digestible carbohydrate further selected so as to minimize a hydrogen content of said food.

4. The method of Claim 3, said digestible carbohydrate further selected so as to maximize a ratio of moles of said oxygen to moles of said carbon.

5. The method of Claim 4, said digestible carbohydrate selected so as to minimize a content of fats as not maximizing the ratio of moles of said oxygen to moles of said carbon.
6. The method of Claim 5, said digestible carbohydrate comprising glucose ( $C_6H_{12}O_6$ ).
7. The method of Claim 5, said digestible carbohydrate comprising sucrose ( $C_{12}H_{24}O_{12}$ ).
8. The method of Claim 1, said foods that reduce said bicarbonate concentrations further comprising said foods that contain nitrogen.
9. The method of Claim 8 said foods containing nitrogen comprising meat and legumes.